REMARKS

STATUS OF CLAIMS

In response to the Office Action dated May 3, 2007, claims 5-7 have been amended, claim 8 has been canceled and claim 9 has been added. Claims 5-7 and 9 are now pending in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102

Claims 5-8 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al. (U.S. Publication 2002/0140652).

The rejection is moot as to canceled claim 8.

Anticipation, under 35 U.S.C. § 102, requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. ***EMI Group N. Am., Inc., v. Cypress Semiconductor Corp.***, 268 F.3d 1342, 1350 (Fed. Cir. 2001); ***Minnesota Mining and Mfg. v. Johnson & Johnson***, 976 F.2d 1559 (Fed. Cir. 1992); ***Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).

The following differences exist between what is disclosed in the present application an in Suzuki et al.

(a) Difference in the number of table memories

The last portion of paragraph [0043] of Suzuki et al. describes:

> [0043] ...The display drive data generation unit 12 has a correction value conversion table and a differential value conversion table as reference data, in order to carry out high-speed calculation, and downloads this table data in the conversion table ROM 22 to two conversion tables provided internally. In that

> case, the most suitable table data is selected if necessary in accordance with a frequency such as a vertical synchronous signal or the detected temperature from the temperature sensor 24, and downloaded.

That is, in Suzuki et al., in accordance with the detected temperature from the temperature sensor 24, the most suitable table data is selected, and downloaded to the tables 42 and 32.

In view of the disclosures, in Suzuki et al., each of the tables 42 and table 32 is comprised of a *single* table memory.

On the contrary, the liquid crystal display of the present invention has a plurality of 0S table memories (3a to 3c) for a plurality of device interior temperatures and a plurality of achievable gray scale level table memories (6a to 6c) for a plurality of device interior temperatures (page 20, lines 5-11 of the present specification).

Suzuki et al. neither discloses nor suggests a plurality of the differential value conversion tables 32 for a plurality of temperatures and a plurality of the correction value conversion tables 42 for a plurality of temperatures.

(b) Difference in the detection timing of the temperature

The second sentence of paragraph [0043] of Suzuki et al. describes:

> And it is necessary to find, for each frame, the display drive data Fo together with the post-drive status data Fp of that frame.

In view of this description, it is clear that both of the tables 42 and 32 are also referred for each frame to find the data Fo and Fp (paragraph [0053], lines 15-17 and Fig. 3). Based on the above understanding, it is impossible in Suzuki et al. for each frame to download the most suitable table data to the tables 42 and 32, rewrite the tables 42 and 32 and be referred to the tables 42 and 32 in order to

find the data Fo and Fp of that frame. Therefore, in Suzuki et al., the downloading of the most suitable table data for the temperature is done only once at beginning of the start-up of the liquid crystal display device.

Based on the above understanding, in Suzuki et al., it is impossible to find the most suitable data Fo and Fp for the device interior temperature by referring to the tables 42 and 32 downloaded at beginning the start-up of the liquid crystal display device, since the device interior temperature changes/rises in accordance with a lapse time from the beginning of the start-up (due to radiation of backlights, source circuits and the like).

In contrast, in the present invention, it is possible to determine the most suitable achievable gray scale level data and write-gray scale level data, since the liquid crystal display:

1) has a plurality of OS table memories (3a to 3c) for a plurality of device interior temperatures and a plurality of achievable gray scale level table memories (6a to 6c) for a plurality of device interior temperatures,

2) selects, from the plurality of achievable gray scale level table memories, an achievable gray scale level table memory for the detected device interior temperature and from the plurality of write-gray scale level table memories, a write-gray scale level table memory for the detected device interior temperature, and

3) determines the achievable gray scale level data by referring to the selected achievable gray scale level table memory and the write-gray scale level data by referring to the selected write-gray scale level table memory. (page 20, lines 5-16 and page 21, line 15-page 22, line 12 of the present specification).

In order to clarify the above-mentioned differences between the present invention and Suzuki et al., claim 5 has been amended to delineate, *inter alia*:

> ...
> a temperature detector for detecting a device interior temperature,
> wherein the achievable gray scale level determining section has a plurality of achievable gray scale level table memories for a plurality of device interior temperatures,
> wherein each of the plurality of achievable gray scale level table memories stores achievable gray scale level parameters, each representing achievable gray scale brightness after the lapse of one vertical display period of the liquid crystal display panel, obtained from the optical response characteristics of the liquid crystal display panel,
> wherein the write-gray scale level determining section determines the write-gray scale level data to be supplied to the liquid crystal display panel, based on achievable gray scale level data of the liquid crystal display panel, corresponding to input image data at the previous vertical display period, output from the achievable gray scale level determining section and the input image data at the current vertical display period, and
> wherein the achievable gray scale level determining section selects, from the plurality of achievable gray scale level table memories, an achievable gray scale level table memory for the detected device interior temperature, and determines the achievable gray scale level data by referring to the selected achievable gray scale level table memory.

In addition, claim 6 has been amended to recite:

> The liquid crystal display according to Claim 5,
> wherein the write-gray scale level determining section has a plurality of write-gray level table memories for a plurality of device interior temperatures,
> wherein each of the plurality of write-gray scale level table memories stores write-gray scale level parameters, each representing write-gray scale brightness in accordance with a combination of gray scale level transitions, and
> wherein the write-gray scale level determining section selects, from the plurality of write-gray scale level table memories, a write-gray scale level table memory for the detected device interior temperature, and determines the write-gray scale level data by referring to the selected write-gray scale level table memory.

Finally, claim 7 has been amended to recite:

> The liquid crystal display according to Claim 5, wherein the achievable gray scale level parameters stored in each of the plurality of achievable gray scale level table memories are achievable gray scale level parameters for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly.

The features now recited in amended independent claim 5, as well as amended dependent claims 6 and 7, are not disclosed or suggested in Suzuki et al. Therefore, the allowance of claims 5-7, as amended, is respectfully solicited.

NEW CLAIM

New claim 9, depending from amended claim 6 is submitted and recites:

> wherein the write-gray scale level parameters stored in each of the plurality of write-gray scale level table memories are write-gray scale level parameters for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly.

Suzuki et al. does not disclose or suggest such feature for write-gray scale parameters stored in each of a plurality of write-gray scale level table memories. Thus, claim 9 is patentable over Suzuki et al. for reason in addition to the fact that it depends from claim 6, which is patentable over Suzuki et al. Therefore, the allowance of new claim 9 is respectfully solicited.

CONCLUSION

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise, Reg. No. 34,523 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Due: August 3, 2007

Respectfully submitted,

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